ECB-3220

Wireless Long Range Multi-function Client Bridge

2.4GHz	EIRP up to 1000mW	Access Point/Client Bridge/Repeater/Client Router

ECB3220 is a powerful client bridge. It supports several networking activities of Client Bridge/ Client Router/ Access Point / Repeater operating seamlessly in the 2.4 GHz frequency wireless standards. It's the best way to add wireless capability to your existing wired network, or to add bandwidth to your wireless installation.

With high output power and high gain antenna, it enhances the transmit output power up to 1000mW. Also, the sensitivity is industrial best which enables the throughput performance keeps at high data rate and farther distance.

To protect your wireless connectivity, it can encrypt all wireless transmissions through 64/128-bit WEP data encryption and also supports WPA/WPA2. The MAC address filter lets you select exactly which stations should have access to your network. User isolation function can protect the private network between client users.

Package Content

- 1* Wireless long range multi-function client bridge (ECB3220)
- 1* 12V/1A Power Adapter
- 1* CAT5 UTP Cable
- 1* QIG
- 1* CD (User's Manual)
- 1* 5dBi 2.4GHz Dipole Antenna

Features	Benefits
High Speed Data Rate Up to 54Mbps	Capable of handling heavy data payloads such as MPEG video streaming
Total EIRP up to 1000mW	Excellent output power spreads the operation distance
IEEE 802.11b/g Compliant	Fully Interoperable with IEEE 802.11b/IEEE802.11g

* Theoretical wireless signal rate based on IEEE standard of 802.11b, g, chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.

EnGenius Networks Singapore Pte Ltd
215 Henderson Road #01-04 Henderson Industrial Park Singapore 159554
Tel: +65-62271088 Fax: +65-62272766
Website: www.engeniustech.com.sg Email: inquiry@engeniustech.com.sg

February 17, 2009

ECB-3220

Wireless Long Range Multi-function Client Bridge

2.4GHz	EIRP up to 1000mW	Access Point/Client Bridge/Repeater/Client Router

	compliant devices
SNMP Remote Configuration Management	Help administrators to remotely configure or manage the Access Point easily.
Point-to-point, Point-to-multipoint Wireless Connectivity	Let users transfer data between two buildings or multiple buildings
WPA2/WPA/ IEEE 802.1x support	Powerful data security
Hide SSID (AP Mode)	Avoids unallowable users sharing bandwidth, increases efficiency of the network
DHCP Client/ Server	Simplifies network administration
WDS (Wireless Distributed System)	Make wireless AP and Bridge mode simultaneously as a wireless repeater
Universal Repeater	The easiest way to expand your wireless network's coverage
MAC address filtering (AP mode)	Ensures secure network connection
User isolation support (AP mode)	Protect the private network between client users.
PPPoE function support (CR mode)	Easy to access internet via ISP service authentication
Power-over-Ethernet (IEEE802.3af)	Flexible Access Point locations and cost savings
Keep personal setting	Keep the latest setting when firmware upgrade

Technical Specifications

Hardware Specifictions

Expansion Slots	N/A
Physical Interface	● LAN: One 10/100 Fast Ethernet RJ-45 ● Reset Button ● Power Jack

* Theoretical wireless signal rate based on IEEE standard of 802.11b, g, chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.

EnGenius Networks Singapore Pte Ltd
215 Henderson Road #01-04 Henderson Industrial Park Singapore 159554
Tel: +65-62271088 Fax: +65-62272766
Website: www.engeniustech.com.sg Email: inquiry@engeniustech.com.sg

February 17, 2009

ECB-3220

Wireless Long Range Multi-function Client Bridge

2.4GHz	EIRP up to 1000mW	Access Point/Client Bridge/Repeater/Client Router

LEDs Status	● Power/ Status ● LAN (10/100Mbps) ● WLAN (Wireless Connection)
Power Requirements	● Power Supply: 90 to 240 VDC ± 10%, 50/60 Hz (depends on different countries) ● Active Ethernet (Power over Ethernet, IEEE802.3af)- 48 VDC/0.375A ● Device: 12V/1A
Regulation Certifications	● FCC Part 15, CE

➢RF Specification

Frequency Band	2.400 ~ 2.484 GHz
Media Access Protocol	Carrier sense multiple access with collision avoidance (CSMA/CA)
Modulation Technology	● OFDM: BPSK, QPSK, 16-QAM, 64-QAM ● DBPSK, DQPSK, CCK
Operating Channels	11 for North America, 14 for Japan, 13 for Europe
Receive Sensitivity (Typical)	● IEEE802.11g 6Mbps@ -84dBm 54Mbps@ -70dBm ● IEEE802.11b 1Mbps@ -92dBm 11Mbps@ -84dBm

* Theoretical wireless signal rate based on IEEE standard of 802.11b, g, chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.

EnGenius Networks Singapore Pte Ltd
215 Henderson Road #01-04 Henderson Industrial Park Singapore 159554
Tel: +65-62271088 Fax: +65-62272766
Website: www.engeniustech.com.sg Email: inquiry@engeniustech.com.sg

February 17, 2009

ECB-3220

Wireless Long Range Multi-function Client Bridge

2.4GHz	EIRP up to 1000mW	Access Point/Client Bridge/Repeater/Client Router

Available transmit power	● IEEE802.11g 26dBm@6~24 Mbps 24dBm@36 Mbps 22dBm@48 Mbps 21dBm@54Mbps ● IEEE802.11b 26dBm@1 ~ 11Mbps
Antenna *1	Detachable omni antenna TNC type; Peak Gain = 5dBi (Reverse)

● Antenna Specification

Electrical Properties	Impedance	50 ohm
	Frequency Range	0~6 GHz
	V.S.W.R	1.5 (Max.)
	Working Voltage	≦500 Vrms
	Dielectric Withstanding Voltage	≦1500 Vrms
	Insulation Resistance	≧5000 Megohms
	Contact Resistance	Center contact: 1.5 Milliohms (Max.) Outer contact: 0.2 Milliohms (Max.)

● Antenna Radiation Patterns

* Theoretical wireless signal rate based on IEEE standard of 802.11b, g, chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.

EnGenius Networks Singapore Pte Ltd
215 Henderson Road #01-04 Henderson Industrial Park Singapore 159554
Tel: +65-62271088 Fax: +65-62272766
Website: www.engeniustech.com.sg Email: inquiry@engeniustech.com.sg

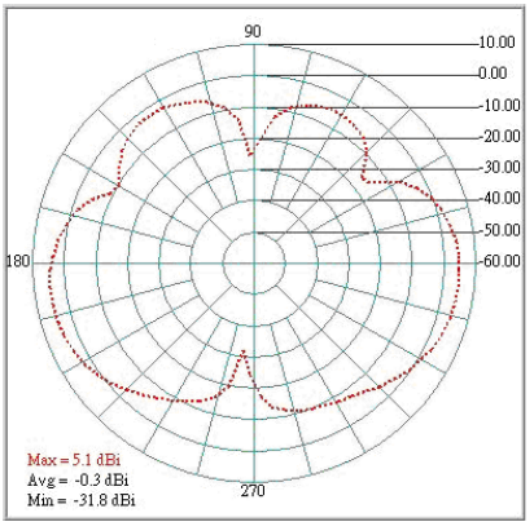
February 17, 2009

ECB-3220

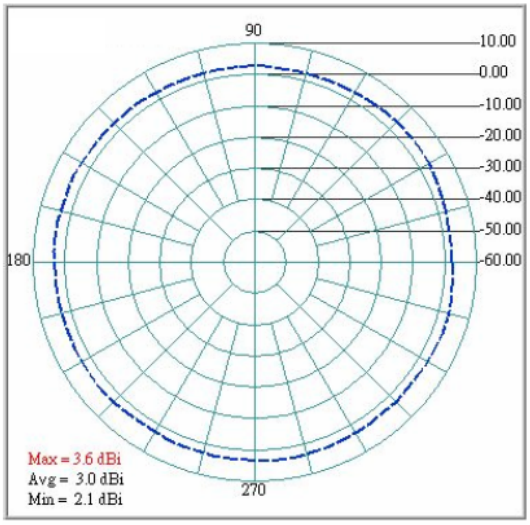
Wireless Long Range Multi-function Client Bridge

2.4GHz	EIRP up to 1000mW	Access Point/Client Bridge/Repeater/Client Router

E-Plan
2.4 GHz



H-Plan
2.4 GHz



* Theoretical wireless signal rate based on IEEE standard of 802.11b, g, chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.

EnGenius Networks Singapore Pte Ltd
215 Henderson Road #01-04 Henderson Industrial Park Singapore 159554
Tel: +65-62271088 Fax: +65-62272766
Website: www.engeniustech.com.sg Email: inquiry@engeniustech.com.sg

February 17, 2009

ECB-3220

Wireless Long Range Multi-function Client Bridge

2.4GHz	EIRP up to 1000mW	Access Point/Client Bridge/Repeater/Client Router

- **Software Features**
  - ➢ **Setting**

Topology	Infrastructure/Ad-Hoc
Operation Mode	Access Point/Client Bridge/Repeater/ Client Router
LAN	• DHCP Server • DHCP Client
WAN (Client Router mode)	• PPPoE
Router	• NAT/ NAPT
VPN	VPN pass-through (PPTP, L2TP, IPSEC)
Wireless	• Wireless Mode – 11b / 11g / Auto • Auto Channel Selection • Transmission Rate ➢ 11 b/g: 108, 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 in Mbps
Security	• WEP Encryption-64/128/152 bit • WPA / WPA2 Personal (WPA-PSK using TKIP or AES) • WPA / WPA2 Enterprise (WPA-EAP using TKIP) • 802.1x Authenticator / Radius Client (AP mode) • MAC address filtering • Hide SSID in beacons • User isolation • NAT in CR mode

* Theoretical wireless signal rate based on IEEE standard of 802.11b, g, chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.

EnGenius Networks Singapore Pte Ltd
215 Henderson Road #01-04 Henderson Industrial Park Singapore 159554
Tel: +65-62271088 Fax: +65-62272766
Website: www.engeniustech.com.sg Email: inquiry@engeniustech.com.sg

February 17, 2009

ECB-3220

Wireless Long Range Multi-function Client Bridge

2.4GHz	EIRP up to 1000mW	Access Point/Client Bridge/Repeater/Client Router

QoS	• WMM

➢ **Management**

Configuration	Web-based configuration (HTTP)/Telnet
Firmware Upgrade	• Upgrade firmware via web-browser • Keep latest setting when f/w update
Administrator Setting	• Administrator password change
Reset Setting	• Reboot (press 1 second) • Reset to Factory Default (press 5 seconds)
System monitoring	Status, Statistics and Event Log
SNMP	V1, V2c
MIB	Private MIB
Backup & Restore	Settings through Web

- **Environment & Physical**

Temperature Range	• Operating: 0°C to 45°C (32°F to 113°F) • Storage: -20°C to 70°C (-4°F to 158°F)
Humidity (non-condensing)	5% ~ 95% typical

* Theoretical wireless signal rate based on IEEE standard of 802.11b, g, chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.

EnGenius Networks Singapore Pte Ltd
215 Henderson Road #01-04 Henderson Industrial Park Singapore 159554
Tel: +65-62271088 Fax: +65-62272766
Website: www.engeniustech.com.sg Email: inquiry@engeniustech.com.sg

February 17, 2009

ECB-3220

Wireless Long Range Multi-function Client Bridge

2.4GHz	EIRP up to 1000mW	Access Point/Client Bridge/Repeater/Client Router

Dimensions	125mm (L) x 108mm (W) x 31mm (H)
Weight	350g

V2.0

* Theoretical wireless signal rate based on IEEE standard of 802.11b, g, chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.

EnGenius Networks Singapore Pte Ltd
215 Henderson Road #01-04 Henderson Industrial Park Singapore 159554
Tel: +65-62271088 Fax: +65-62272766
Website: www.engeniustech.com.sg Email: inquiry@engeniustech.com.sg

February 17, 2009